

CORRES CONTROL  
INCOMING LTR NO

2704 RF 91

DUE  
DATE

ACTION

| DIST            | LTR | ENC |
|-----------------|-----|-----|
| BENJAMIN, A     |     |     |
| BRETZKE, J C    |     |     |
| BURLINGAME, A H |     |     |
| COPP, R D       |     |     |
| CROUCHER, D W   |     |     |
| DAVIS, J G      |     |     |
| EVERED, J E     | X   |     |
| FEBBERA, D W    |     |     |
| FERRIS, L R     |     |     |
| FRAIKOR, F J    |     |     |
| FRANCIS, G E    |     |     |
| GOODWIN, R      |     |     |
| HANNI, B J      |     |     |
| HEALY, T J      |     |     |
| IDEKER, E H     |     |     |
| JENS, J P       |     |     |
| KERSH, J M      | X   |     |
| KIRBY, W A      |     |     |
| KRIEG, D        |     |     |
| LEE, E M        |     |     |
| MAJESTIC, J R   |     |     |
| MARX, G E       |     |     |
| MATHEWS, T A    |     |     |
| McCLUSKY, J K   |     |     |
| MEURRENS, B E   |     |     |
| MORGAN, R V     |     |     |
| PIZZUTO, V M    |     |     |
| POTTER, G L     |     |     |
| SAFFELL, B F    |     |     |
| SANDLIN, N B    |     |     |
| SWANSON, E R    |     |     |
| WIEBE, J S      |     |     |
| WILKINSON, R B  |     |     |
| WILSON, J M     |     |     |
| YOUNG, E R      |     |     |
| ZANE, J O       |     |     |
| Hobbs, F        | X   |     |

CORRES CONTROL  
TRAFFIC

Reviewed for Addressee  
Corres Control RFP

8-27-91

DATE BY

Ref Ltr #

Department of Energy

ROCKY FLATS OFFICE  
P O BOX 928  
GOLDEN COLORADO 80402-0928

AUG 23 1991

AUG 27 8 21 AM '91 91-DOE-6830

EC&C  
ROCKY FLATS PLANT  
CORRESPONDENCE CONTROL

Ms Judy Bruch  
Rocky Flats Program Unit  
Colorado Department of Health  
4210 East 11th Avenue  
Denver, Colorado 80220-3716

Dear Ms Bruch

The purpose of this letter is to transmit to you data for americium analyses from our Terminal Pond A-4, and to request your concurrence to initiate discharges from this Pond as soon as possible

As we have previously informed you, our initial data from split samples taken on July 30, 1991, from Pond A-4 indicated that americium levels in Pond A-4 may have been in excess of the State of Colorado site-specific stream standard for this parameter of 0.05 pCi/l. Two split samples were taken and analyzed by our on-site laboratories in Building 123. The results for these split samples were 0.084 and 0.120 pCi/l. The planchets for these samples were subsequently recounted, and yielded values of 0.048 and 0.098 pCi/l, respectively. All data referred to in this letter are summarized in the attached tables.

The value for the batch blank for these samples was high, however, yielding a result of 0.35 pCi/l Am. This value was sufficiently high such that our laboratories rejected it as an outlier and did not use this value in calculating the mean blank (the mean blank value is used to calculate background, which is then subtracted to yield the final data values). The high value of this batch blank, together with our laboratory's rejection of this value, leads us to believe that the data generated in this sample run are suspect and are erroneously high.

We subsequently re-analyzed both sample splits in duplicate. Of the four re-analyses, three were considered valid by our laboratories (one was rejected because of poor planchet characteristics). Of the three valid re-analyses, all were less than the 0.05 pCi/l standard, and averaged 0.028 pCi/l. For all these re-analyses, batch blank values were high, ranging from 0.16 to 0.19 pCi/l, these values were not rejected by our laboratories as outliers, however.

We have also included data from Pond A-4 from a raw water sample gathered July 23 as part of our ongoing in-pond characterization program. This sample was analyzed in duplicate by TMA/Norcal Laboratories in Richmond, California. The Am values for the two split samples were 0.011 and 0.008 pCi/l. If these results are then averaged with the other results gathered for July 30 (assuming that the two counts for the first analysis of the July 30 samples are averaged together to produce a single value), the resulting average value for all samples and valid analyses is 0.040 pCi/l. We believe that an analysis of the data in this regard provides justification for discharge, given your organization's previous determination that the americium standard should be interpreted and implemented as a running thirty-day average value.

ADMIN RECORD

Judy Bruch


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We therefore believe that the Am data gathered prior to release provide two forms of justification for discharge. First, we believe that the high batch blank value for our initial analyses from split samples taken on July 30 cast substantial doubt upon the representativeness of these results, and that the data from our re-analyses of these samples justifiably can and should be used to evaluate the suitability of Pond A-4 for discharge. Second, the inclusion of the Am results for the in-pond sample of July 23 with all the July 30 data (including those results we believe to be unrepresentative) yields an average value less than the State standard. Consistent with your previous interpretation of this standard, we believe that this average result provides justification for discharge.

All discharges from Pond A-4 during this discharge episode will be treated using prefiltration and granular activated carbon. Discharges will be coordinated with all interested parties, in particular the City of Broomfield. We request concurrence from your agency to initiate discharge as soon as possible, since water levels in Pond A-4 are rising rapidly and we wish to maintain safe water levels and adequate capacity to store additional inflow.

If you have any questions regarding our request, please call either me or Mr. Tom Lukow of my staff at 966-6246.

Sincerely,



David P. Simonson  
Assistant Manager  
for Environmental Management

Enclosure

cc w/Enclosure

G. Wilson, City of Broomfield  
S. Nachtrieb, City of Westminster  
K. Scott, City of Northglenn  
B. Hart, City of Thornton  
R. Shankland, U.S. EPA Region VIII

w/o Enclosure

T. Lukow, RFO  
J. Rampe, RFO  
J. Kersh, EG&G  
D. Hauser, RFO